

Determination of boundary layers in the plane problem for three-layer strips. Part 2

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Abstract

In the first part of this paper, we considered the exact statement of the plane elasticity problem in displacements for strips made of various materials (problem A, an isotropic material; problem B, an orthotropic material with $2G_{12} < \sqrt{E_1 E_2}$; problem C, an orthotropic material with $2G_{12} > \sqrt{E_1 E_2}$). Further, we stated and solved the boundary layer problem (the problem on a solution decaying away from the boundary) for a sandwich strip of regular structure consisting of isotropic layers (problem AA). In the present paper, we use the solution of the plane problem to consider the problem for sandwich strips of regular structure with isotropic face layers and orthotropic filler (problem AB). © Allerton Press, Inc., 2009.

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